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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,823	04/13/2004	Yuuki Masumura	Q80663	3459
23373 7590 01/08/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER SITTA, GRANT	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/822,823		MASUMURA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Grant D. Sitta		2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) 2-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,088,354 Matsumoto. Although the conflicting claims are not identical, they are not patentably distinct from each other for the reasons below.

US Patent Number 7,088,354	US Patent Application 10/822823
Claim 1	Claim 1
a detection device which detects abnormalities in the power-supply voltage of said control-signal-generation unit;	a detection device that detects when said connector is disconnected; and

a control device which controls said drive unit when said detection device detects an abnormality in said power-supply voltage, wherein said display-panel-drive apparatus drives a plasma display panel as said display panel and wherein said control signals are signals that cause said drive unit to output scan pulses given to successive display lines for setting some of the discharge cells located on said plasma-display panel as light-emitting cells and some as non-emitting cells.	a control device that controls said drive unit when said detection device detects that said connector is disconnected;  wherein said control signals are signals that cause said drive unit to output scan pulses given to successive display lines for setting some of the discharge cells located on said plasma display panel as light-emitting cells and some of non-emitting cells.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In regards to claim 1, it is unclear how the control unit "outputs control signals for **controlling said drive unit to said drive unit**," (claim 1, lines 2-3).

6. Claims 1 and 7 recites the limitation "said plasma-display panel" in claim 1 last two lines. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1 and 6-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al (5,563,624) hereinafter, Imamura.

10. In regards to claim 1 and 7, Imamura discloses the limitations display-panel-drive apparatus (fig. 1 (20)) having a drive unit (fig. 1 24-1—24-m, and 46-1—46-n) that drives the display panel (fig. 5 (22)) and a control unit (fig. 5 (12)) that outputs control signals (DFF, SP, FR, LP, XSCL, and D0-D7) for controlling said drive unit (fig. 1 24-1—24-m, and 46-1—46-n) to said drive unit, the display-panel-drive apparatus comprising: of a drive board (examiner notes circuit boards

are an inherent part of circuits) of said drive unit fig. 1 24-1—24-m, and 46-1—46-n); a control board examiner notes circuit boards are an inherent part of circuits of said control unit (fig. 1 (10 and 12);

a transmission line (fig. 1 (30)) that transmits said control signals from said control board to said drive board by way of a removable connector (fig. 7 (28B))

a detection device (fig. 1 (48)) that detects when said connector is disconnected (fig. 1 (Poff) Examiner notes that Dff is sent to both circuits, thus (48) detects when (28B) has been turned off) ; and

a control device (fig. 1 (12)) that controls said drive unit (fig. 1 24-1—24-m, and 46-1—46-n) when said detection device detects that said connector is disconnected (fig. 1 (48)); and wherein

said detection device detects that said connector is disconnected by detecting when the connection terminals which are included in of said connector are disconnected (fig. 1 (Poff) Examiner notes that Dff is sent to both circuits, thus (48) detects when (28B) has been turned off).

wherein said control device stops operation (col. 12, lines 48-67) of said drive unit when said detection device detects that said connector is disconnected ("When the forced display blank control signal DFF on the part of the liquid crystal display controller 12 becomes the L level at a time t.sub.11, the outputs T.sub.1, T.sub.2, T.sub.n also become the L level. Correspondingly, the forced display blank control signal DF on the side of the liquid display module unit 70 assumes the L level. The liquid crystal display panel 22 enters a display-off period C. At a time t.sub.12 after a 1-2 frame period from time t.sub.11, the

output Q of the D-type flip-flop 78b of the power on/off control circuit 78.sub.1 is changed to the L level. The outputs PF.sub.1, PF.sub.2, PF.sub.n also become the L level. As a result, the power-off terminal POFF of the liquid crystal power source circuit 28 also assumes the L level. Then the generation of the liquid crystal driving voltages V.sub.0 -V.sub.5 stops". Col. 12, lines 48-61)

on said plasma display panel as light-emitting cells and some of non-emitting cells (col. 1, line 12).

Imamura differs from the claimed invention in that Imamura does not *explicitly* disclose wherein said control signals are signals that cause said drive unit to output scan pulse given to successive display lines for setting some of the discharge cells located

However, Imamura teaches a system and method for wherein said control signals are signals (fig. 4A-4M) that cause said drive unit to output scan pulse given to successive display lines for setting some of the discharge cells located (Fig. 2 and fig. 6 cascade arrangement)

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Imamura to include the use of successive driving as in order to apply the scan signal in successive order.

11. In regards to claims 6 and 8, Imamura teaches wherein said drive unit includes first switch (S21) (fig. 3 f1,f2, f3 and f4) and second switch (S22) (Fig. g. 3 f1,f2, f3 and f4) which are connected to a power supply (B2) (Fig. 3 (V0-V5)),

and scan pulses are outputted from a connection point between (fig. 3 f1,f2, f3 and f4 are all connected OUT (x1)) where the first switch (S21) and the second switch (S22) (fig. 3 f1,f2, f3 and f4 are all connected OUT (x1)), wherein when said detection device detects that said connector is disconnected, the first switch (S21) is set to ON state and the second switch (S22) is set to OFF state (col. 6-7, lines 45-54).

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grant D. Sitta whose telephone number is 571-270-1542. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Grant D. Sitta  
January 3, 2008

  
AMARE MENGISTU  
SUPERVISORY PATENT EXAMINER